



GUIDELINE 38 — BENEFICIAL USE OF INERT WASTE

North Dakota Department of Health – Division of Waste Management

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I. Introduction

It is important to know what inert waste is, how it can be properly handled, when it can be beneficially used, and where it must be legally disposed. Before beginning a construction and demolition project, contact your local city or county authorities. They may have more stringent requirements, zoning regulations or other requirements.

Inert waste, including construction and demolition waste, is defined and regulated by the North Dakota Solid Waste Management Rules NDAC 33-20-01.1-03. "Inert waste" means non-putrescible solid waste that will not contaminate water or form a contaminated leachate. Inert waste does not serve as food for vectors. Inert waste includes, but is not limited to construction and demolition material such as metal, wood, bricks, masonry and cement concrete; asphalt concrete; metal; tree branches; bottom ash from coal-fired boilers; and waste coal fines from air pollution control equipment.

Download an [Inert Waste Beneficial Use Application](#) or, for North Dakota Department of Transportation (NDDOT) Projects, a [Department Of Transportation Projects Inert Waste Beneficial Use Application](#).

II. Inert Waste Appropriate for Beneficial Use

Some inert waste, such as construction and demolition concrete, asphalt, brick, clean wood, etc., can be beneficially used if done in a manner approved by the North Dakota Department of Health, saving space that it would otherwise occupy in a landfill. Many materials can be ground up for aggregate or landscaping purposes. Specific types of fill materials may be allowed to be used for the purpose of roadbed preparation, foundation support, drainage layers, erosion control, erosion repair, bank stabilization, landscaping, and other land improvement. Inert waste that might be appropriate for beneficial use includes:

- Sand, gravel, etc.
- Stone, rock, etc.
- Soil.
- Brick.
- Concrete rubble.
- Asphalt rubble.
- Untreated wood and wood that is not painted with lead-based paint.
- Other material, if it is approved by the Department of Health, that will not create problems and is acceptable to other governmental agencies

III. Inert and Other Wastes NOT Appropriate for Beneficial Use

Inert waste to be considered for beneficial use cannot contain asbestos, special waste, liquid waste, oil-containing material, putrescible waste, household waste, industrial solid waste, paper or cardboard, scrap metal, appliances, tires, drums, fuel tanks, hazardous waste, waste that contains polychlorinated biphenyl (PCB) or other un-allowed materials, ash or debris. These products require specific attention for proper disposal. The origin of materials such as concrete and asphalt should be investigated prior to application for beneficial use. Any material that has been exposed to PCBs, lead, oil or other contaminants may not be suitable for beneficial use applications.

Improper use or placement of materials constitutes disposal and can lead to state and/or federal enforcement actions that may include penalties in addition to requiring proper cleanup and disposal. The Department of Health encourages appropriate reuse or recycling of inert building and demolition materials, provided that the wastes and the beneficial use application(s) are completed in an approved manner in compliance with all state, federal and local requirements.

IV. Inert Waste Beneficial Use Do's and Don'ts

Do's -- Inert waste beneficial use methods that MUST be addressed for Department of Health approval:

- Complete a Notification of Demolition Activity prior to demolition to identify asbestos materials that may be encountered. All asbestos-containing material must be removed before processing or placement for beneficial use.
- Carefully segregate and screen materials such as concrete, brick, asphalt, clean wood, etc.
- Separate metal for recycling. Metal must be removed for most project approvals.
- Carefully sort, screen, process and crush material for most beneficial uses. Work with the Department of Health and/or Army Corps of Engineers to determine appropriate size of chunks to be beneficially used, and if rounding chunks is necessary.
- Use processed brick, concrete, etc., for land improvement and stabilization projects.
- Use clean, untreated and unpainted wood for reuse, remanufacturing or firewood, or process for local biomass projects or for landscape mulch.
- Use caution when handling asphalt – it may release contaminants if placed near waterways or sensitive areas.
- Make sure all activities are in compliance with an approved stormwater control plan and that water erosion, wind erosion and dust are controlled.
- Haul remaining waste or residue to a permitted landfill.

Don'ts -- The following inert waste applications will NOT be considered for Department of Health approval:

- Don't use demolition waste other than clean soil, rock, brick and concrete rubble as fill for land improvements.
- Don't use material containing lead-based paint for mulching or landscaping or for use in children play areas, such as playgrounds, schools or parks.
- Don't deposit demolition waste in a stream, creek, river or wetland.
- Don't deposit fill in a stream, creek or river in such a way that it impacts the flow of the stream or the capacity of the flood plain without first obtaining approval from the Division of Water Quality and a permit from the Army Corps of Engineers if required.

- Don't dispose ash or mixed debris from a burned building in the same manner as any of the illegal methods stated above.
- Don't deposit demolition material where sharp edges, metal, etc., may create safety hazards.
- NOTE: The Army Corps of Engineers does not allow brick, asphalt, rebar, etc., to be used in fill projects in waters of the United States.

V. Licensed Inert Waste Facilities

A list of permitted inert waste facilities in North Dakota can be found at: [Inert Waste Landfills](#).

VI. Concrete and Asphalt Processors

A list of concrete and asphalt processors is at: [Concrete Asphalt Recycling Facilities](#).

VII. Inert Waste Beneficial Use Requirements

While fill may be approved for erosion control, erosion repair and bank stabilization, special considerations are required for its use in waters of the U.S. as regulated by the Army Corps of Engineers. Waters of the U.S. include rivers, lakes, streams, and wetlands. Any fill within these waters requires coordination with the Army Corps of Engineers to determine whether a federal permit is needed for the activity, in addition to state approval.

In addition, the fill to be used in waters of the U.S. must meet the requirements for suitable materials as defined by the Army Corps of Engineers. Unsuitable materials include asbestos, asphalt, trash, car bodies, concrete with exposed rebar, or material that may have elevated lead from lead-based paint.

References:

“Construction and Demolition Waste in Nebraska: An Overview of Managing Waste Generated from Construction and Demolition Projects,” Nebraska Department of Environmental Quality (NDEQ), January 2005. www.deq.state.ne.us.